

IN THE ABSTRACT

Please replace the present abstract with the following:

ABSTRACT OF THE DISCLOSURE

Methods and apparatus are described for cantilever structures that include a vertically aligned nanostructure, especially vertically aligned carbon nanofiber scanning probe microscope tips. An apparatus includes a cantilever structure including a substrate including a cantilever body, that optionally includes a doped layer, and a vertically aligned nanostructure coupled to the cantilever body.